may have 5 legislative days within which to revise and extend their remarks on H.R. 3204, the measure just passed and to insert extraneous material therein.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Delaware?

There was no objection.

ANNOUNCEMENT BY THE SPEAKER PRO TEMPORE

The SPEAKER pro tempore. Pursuant to clause 8 of rule XX, the Chair will postpone further proceedings today on motions to suspend the rules on which a recorded vote or the yeas and nays are ordered, or on which the vote is objected to under clause 6 of rule XX.

RECORD votes on postponed questions will be taken tomorrow.

DEPARTMENT OF ENERGY HIGH-END COMPUTING REVITALIZATION ACT OF 2004

Mrs. BIGGERT. Mr. Speaker, I move to suspend the rules and concur in the Senate amendment to the bill (H.R. 4516) to require the Secretary of Energy to carry out a program of research and development to advance high-end computing.

The Clerk read as follows:

Senate amendment:

Strike out all after the enacting clause and insert:

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Department of Energy High-End Computing Revitalization Act of 2004''.

SEC. 2. DEFINITIONS.

In this Act:

(1) CENTER.—The term ''Center'' means a High-End Software Development Center established under section 3(d).

(2) HIGH-END COMPUTING SYSTEM.—The term ''high-end computing system'' means a computing system with performance that substantially exceeds that of systems that are commonly available for advanced scientific and engineering applications.

(3) LEADERSHIP SYSTEM.—The term ''Leadership System'' means a high-end computing system that is among the most advanced in the world in terms of performance in solving scientific and engineering problems.

(4) INSTITUTION OF HIGHER EDUCATION.—The term ''institution of higher education'' has the meaning given the term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).

(5) SECRETARY.—The term ''Secretary'' means the Secretary of Energy, acting through the Director of the Office of Science of the Department of Energy.

SEC. 3. DEPARTMENT OF ENERGY HIGH-END COMPUTING RESEARCH AND DEVELOPMENT PROGRAM.

(a) IN GENERAL.—The Secretary shall—

(1) carry out a program of research and development (including development of software and hardware) to advance high-end computing systems; and

(2) develop and deploy high-end computing systems for advanced scientific and engineering applications.

(b) PROGRAM.—The program shall—

(1) support both individual investigators and multidisciplinary teams of investigators;

(2) conduct research in multiple architectures, which may include vector, reconfigurable logic, streaming, processor-in-memory, and multithreading architectures;

(3) conduct research on software for high-end computing systems, including research on algorithms, programming environments, tools, languages, and operating systems for high-end computing systems, in collaboration with architecture development efforts;

(4) provide for sustained access by the research community in the United States to high-end computing systems and to Leadership Systems, including provision of technical support for users of such systems;

(5) support technology transfer to the private sector and others in accordance with applicable law; and

(6) ensure that the high-end computing activities of the Department of Energy are coordinated with relevant activities in industry and with other Federal agencies, including the National Science Foundation, the Defense Advanced Research Projects Agency, the National Nuclear Security Administration, the National Security Agency, the National Institutes of Health, the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, the National Institutes of Standards and Technology, and the Environmental Protection Agency.

(c) LEADERSHIP SYSTEMS FACILITIES.—

(1) IN GENERAL.—As part of the program carried out under this Act, the Secretary shall establish and operate 1 or more Leadership Systems facilities to—

(A) conduct advanced scientific and engineering research and development using Leadership Systems; and

(B) develop potential advancements in high-end computing system hardware and software.

(2) ADMINISTRATION.—In carrying out this subsection, the Secretary shall provide to Leadership Systems, on a competitive, merit-reviewed basis, access to researchers in United States industry, institutions of higher education, national laboratories, and other Federal agencies.

(d) HIGH-END SOFTWARE DEVELOPMENT CENTER.—

(1) IN GENERAL.—As part of the program carried out under this Act, the Secretary shall establish at least 1 High-End Software Development Center.

(2) DUTIES.—A Center shall concentrate efforts to develop, test, maintain, and support optimal algorithms, programming environments, tools, languages, and operating systems for high-end computing systems.

(3) PROPOSALS.—In soliciting proposals for the Center, the Secretary shall encourage staffing arrangements that include both permanent staff and a rotating staff of researchers from other institutions and industry to assist in coordination of research efforts and promote technology transfer to the private sector.

(4) USE OF EXPERTISE.—The Secretary shall use the expertise of a Center to assess research and development in high-end computing system architecture.

(5) SELECTION.—The selection of a Center shall be determined by a competitive proposal process administered by the Secretary.

SEC. 4. AUTHORIZATION OF APPROPRIATIONS.

In addition to amounts otherwise made available for high-end computing, there are authorized to be appropriated to the Secretary to carry out this Act—

(1) $50,000,000 for fiscal year 2005;

(2) $55,000,000 for fiscal year 2006; and

(3) $60,000,000 for fiscal year 2007.

SEC. 5. ASTRONOMY AND ASTROPHYSICS ADVISORY COMMITTEE.

(a) AMENDMENTS.—Section 23 of the National Science Foundation Authorization Act of 2002 (42 U.S.C. 1862n–9) is amended—

(1) in subsection (a) and paragraphs (1) and (2) of subsection (b), by striking ''and the National Aeronautics and Space Administration'' and inserting '', the National Aeronautics and Space Administration, and the Department of Energy'';

(2) in subsection (b)(3), by striking ''Administration, and'' and inserting ''Administration, the Secretary of Energy, '';

(3) in subsection (c)—

(A) in paragraphs (1) and (2), by striking ''5'' and inserting ''4'';

(B) in paragraph (2), by striking ''and'' at the end;

(C) by redesignating paragraph (3) as paragraph (4), and in that paragraph by striking ''3'' and inserting ''2''; and

(D) by inserting after paragraph (2) the following:

''(3) 3 members selected by the Secretary of Energy; and

(4) in subsection (f), by striking ''the advisory bodies of other Federal agencies, such as the Department of Energy, which may engage in related research activities'' and inserting ''other Federal advisory committees that advise Federal agencies that engage in related research activities''.

(b) EFFECTIVE DATE.—The amendments made by subsection (a) take effect on March 15, 2005.

SEC. 6. REMOVAL OF SUNSET PROVISION FROM SAVINGS IN CONSTRUCTION ACT OF 1996.

Section 14 of the Metric Conversion Act of 1975 (15 U.S.C. 205l) is amended by striking subsection (e).

The SPEAKER pro tempore. Pursuant to the rule, the gentlewoman from Illinois (Mrs. BIGGERT) and the gentleman from Tennessee (Mr. DAVIS) each will control 20 minutes.

The Chair recognizes the gentlewoman from Illinois (Mrs. BIGGERT).

GENERAL LEAVE

Mrs. BIGGERT. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days to revise and extend their remarks and to include extraneous material on the Senate amendment to H.R. 4516, the bill now under consideration.

The SPEAKER pro tempore. Is there objection to the request of the gentlewoman from Illinois?

There was no objection.

Mrs. BIGGERT. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, when we think of how computers affect our lives, we probably think of the work we do on our office desktop machines, or maybe the Internet surfing we do in our spare time. We do not normally think of the enormous contribution that supercomputers, also called high-performance computers, make to the world around us.

These powerful machines are used in the development of pharmaceuticals, in modeling the earth's climate, and in applications critical to ensuring our national and homeland security and our economic competitiveness. High-performance computers also are central to maintaining U.S. leadership in many scientific fields. Computational science complements theory and experimentation in fields such as plasma physics and fusion, astrophysics, nuclear physics and genomics.

The bill currently under consideration, H.R. 4516, spells out in detail the research and development the Department of Energy should be doing to help